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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,107	07/08/2004	Michael Gilles	033682-015	1703
45473	7590	03/14/2006	EXAMINER	
HUTCHISON LAW GROUP PLLC PO BOX 31686 RALEIGH, NC 27612			BASHORE, ALAIN L	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,107

Applicant(s)

GILLES ET AL.

Examiner

Alain L. Bashore

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-20, 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 2001049414 (Endo et al) in view of Adriaensen et al in further view of Andre.

Endo et al discloses a process for the preparation of a steel surface by dip galvanizing is disclosed utilizing a molten zinc bath. There is disclosed cleaning, pickling, applying a protective layer by a flux solution of bismuth compound, galvanizing by single-dip in aluminum containing molten zinc bath, where cleaning is performed that removes residual dirt (see English translated abstract). There also disclosed percentages that are included within the ranges claimed by applicant.

Endo et al does not disclose the surface cleaning by electro-cleaning further performed by electropickling.

Adriaensen et al discloses surface cleaning by electro-cleaning further performed by electro-pickling (col 2, lines 61-68; col 3, lines 1-14).

It would have been obvious to one with ordinary skill in the art to include surface cleaning by electro-cleaning further performed by electropickling because Adriaensen et al teaches advantages (col 2, lines 47-66).

Endo does not disclose cleaning performed to a level of less than 0.6 ug/cm³ residual dirt.

Andre discloses cleaning performed to a level of less than 0.6 ug/cm³ residual dirt (col 5, lines 23-25; "any").

It would have been obvious to one with ordinary skill in the art to include cleaning performed to a level of less than 0.6 ug/cm³ residual dirt because Andre discloses the need to remove all residual dirt.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al in view of Adriaensen et al in further view of Andre as applied to claims above, and further in view of British patent 869,866 (Boller et al)

Endo et al in view of Adriaensen et al in further view of Andre does not disclose a flux solution between 15-35 wt% of ZnCl₂.

Boller et al teaches a flux solution between 15-35 wt% of ZnCl₂ (p 4, lines 5-15).

It would have been obvious to one with ordinary skill in the art to include a flux solution between 15-35 wt% of ZnCl₂ because Boller teaches advantages col 4, lines 5-15).

Response to Arguments


6. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alain L. Bashore
Primary Examiner
Art Unit 1762